Souheil M. Ezzedine, PhD, PE

Souheil is an applied mathematician and statistician in the Computational Engineering Division at Lawrence Livermore National Laboratory. He is versatile in deterministic and stochastic methods and supports the E-Program and S-Program within Global Security. His interests include CFD, structural analysis, probabilistic assessment, uncertainty quantification, multi-phase flow, reactive transport, heat flow, geomechanics, reservoir engineering, geophysics, solid mechanics, numerical and analytical methods for partial differential equations, numerical nonlinear and linear solvers, computational physics, computational statistics, spatial statistics, inverse problem, perturbation & homogenization techniques, numerical upscaling techniques, optimization, coupled processes and parallel computing.

Souheil earned his PhD from École Nationale Supérieure des Mines de Paris. Souheil was a post-doctoral researcher at UC Berkeley and UC Davis and has 10 years of consulting experience. While at LLNL, Souheil has been a technical staff on multi-disciplinary projects: Yucca Mountain nuclear storage, underground coal gasification, geological carbon sequestration, infrastructure vulnerability, probabilistic assessment of radioactive leakages, multiphase flow in pipes and reservoirs, detection of buried structures, to name a few and supports a variety of DOE, DOD, DHS funded projects. Dr. Ezzedine serves on several national and international scientific committees, associate editor boards and chairman on several national and international symposiums and workshops. He is a registered professional engineer with the state of California, a board member of the Society of Petroleum Engineering and a lecturer at several universities around the bay area. Dr. Ezzedine holds several awards and honors.

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